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L8	1935	(707/2).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/20 17:09

L9	4801	(707/3).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/20 17:09
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1 **Technology trends of the new Internet economy**
Visalovic, D.;
Information Technology Interfaces, 2000. ITI 2000. Proceedings of the 22nd International Conference on , 13-16 June 2000
Pages:49 - 51

[Abstract] [PDF Full-Text (232 KB)] **IEEE CNF**

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2 **B-Course: a Web service for Bayesian data analysis**
Myllymaki, P.; Silander, T.; Tirri, H.; Uronen, P.;
Tools with Artificial Intelligence, Proceedings of the 13th International Conference on , 7-9 Nov. 2001
Pages:247 - 256

[Abstract] [PDF Full-Text (296 KB)] **IEEE CNF**

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3 **SODA: a service-on-demand architecture for application service hosting utility platforms**
Xuxian Jiang; Dongyan Xu;
High Performance Distributed Computing, 2003. Proceedings. 12th IEEE International Symposium on , 22-24 June 2003
Pages:174 - 183

[Abstract] [PDF Full-Text (368 KB)] **IEEE CNF**

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4 **Polimatica: abstraction for customizable private virtual organizations in global grids**
Maeno, Y.; Kawato, M.; Nishimura, S.; Machida, F.; Kamachi, T.;
Web Services, 2004. Proceedings. IEEE International Conference on , 6-9 July 2004

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   O T Anderson, L Luan, C Everhart, M Pereira, et al. **IBM Systems Journal.** Armonk: 2004. Vol. 43, Iss. 4; p. 702 (21 pages)
   Text+Graphics | Page Image - PDF | Abstract

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   Jonathan Angel. **Network Magazine.** San Francisco: Dec 2000. Vol. 15, Iss. 12; p. 104 (4 pages)
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   Ron Anderson. **Network Computing.** Manhasset: Sep 4, 2000. Vol. 11, Iss. 17; p. 43 (11 pages)
   Text+Graphics | Page Image - PDF | Citation

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   Dave Molta. **Network Computing.** Manhasset: Jul 15, 1998. Vol. 9, Iss. 13; p. 51 (8 pages)
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5. **Want to view your plant's operations? Surf your Internet**
   Jim Strothman. **InTech.** Durham: Oct 1997. p. 23 (5 pages)
   Full text | Page Image - PDF | Citation

6. **Enterprise IT architecture based on Java**
   Anonymous. **Manufacturing Systems.** May 1997. Vol. 15, Iss. 5; p. 88
   Full text | Abstract

7. **Sun's CEO says NCs key to zero administration**
   Schwartz, Ephraim. **InfoWorld.** San Mateo: Jan 13, 1997. Vol. 19, Iss. 2; p. 31 (1 page)
   Full text | Page Image - PDF | Abstract

8. **Sun's Java-based network computer; [Computimes, , 2* Edition]**
   Ng Ken Boon. **New Straits Times.** Kuala Lumpur: Nov 25, 1996. p. 60
   Full text | Abstract

9. **Java Computing in the Enterprise: Revolution**
   Tribble, Guy. **Computer Reseller News.** Oct 21, 1996. p. 71 (4 pages)

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10. **Who needs a Network Computer?**
Simpson, David. **Datamation.** Barrington: Oct 1996. Vol. 42, Iss. 16; p. 96 (4 pages)
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11. **The growing problem of electronic theft**
Radigan, Joseph. **United States Banker.** Jun 1993. Vol. 103, Iss. 6; p. 37 (2 pages)
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12. **Inside job**
Computerworld. Framingham: Mar 15, 1993. Vol. 27, Iss. 11; p. 109 (4 pages)
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13. **IBM Announces Five New RISC System/6000 Models, Enhances AIX Operating System, Networking Products and AIX Application Software Development Tools**
Radlinsky, Judy. **Business Wire.** New York: Jan 21, 1992. p. 1
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1 Application of intelligent agent technology for managerial data analysis and mining

Ranjit Bose, Vijayan Sugumaran

January 1999 **ACM SIGMIS Database**, Volume 30 Issue 1

Full text available: pdf(1.96 MB) Additional Information: full citation, abstract, index terms

Data analysis and mining technologies help bring business intelligence into organizational decision support systems (DSS). While a myriad of data analysis and mining technologies are commercially available today, organizations are seeing a growing gap between powerful storage (data warehouse) systems and the business users' ability to analyze and act effectively on the information they contain. We contend that to narrow this gap effectively, a data analysis and mining environment is needed that ...

Keywords: agent-based design, data mining, data warehouse, decision support systems, intelligent agents, multidimensional analysis, prototype implementation, statistical analysis, visualization

2 Representation and use of design rules within a technology adaptable CAD system

J. S. Aude, H. J. Kahn

June 1989 **Proceedings of the 26th ACM/IEEE conference on Design automation**

Full text available: pdf(702.56 KB) Additional Information: full citation, abstract, references, index terms

This paper describes the representation and use of technology related information in a CAD system designed to support technology adaptable applications. This information is described as design rules using a special-purpose language, DRDL, and is stored in a Design Rule Data Base. The main features of DRDL are noted and the mechanisms that can be implemented in application programs which use design rule information are discussed

3 A structural view of the Cedar programming environment

Daniel C. Swinehart, Polle T. Zellweger, Richard J. Beach, Robert B. Hagmann

August 1986 **ACM Transactions on Programming Languages and Systems (TOPLAS)**, Volume 8 Issue 4

Full text available: pdf(6.32 MB) Additional Information: full citation, abstract, references, citings, index terms

This paper presents an overview of the Cedar programming environment, focusing on its overall structure—that is, the major components of Cedar and the way they are organized. Cedar supports the development of programs written in a single programming language, also called Cedar. Its primary purpose is to increase the productivity of programmers whose activities include experimental programming and the development of prototype software systems for a high-performance personal computer. T ...

4 On synchronization in hard-real-time systems
Stuart R. Faulk, David L. Parnas
March 1988 **Communications of the ACM**, Volume 31 Issue 3

Full text available: pdf(1.64 MB) Additional Information: full citation, abstract, references, citings, index terms, review

The design of software for hard-real-time systems is usually difficult to change because of the constraints imposed by the need to meet absolute real-time deadlines on processors with limited capacity. Nevertheless, a new approach involving a trio of ideas appears to be helpful for those who build software for such complex applications.

5 Exploiting software interfaces for performance measurement
Douglas P. Konkin, Gregory M. Oster, Richard B. Bunt
October 1998 **Proceedings of the first international workshop on Software and performance**
Full text available: pdf(1.20 MB) Additional Information: full citation, references, index terms

6 Transparent fault tolerance for distributed Ada applications
Mark A. Breland, Steven A. Rogers, Guillaume P. Brat, Kenneth L. Nelson
November 1994 **Proceedings of the conference on TRI-Ada '94**

Full text available: pdf(1.62 MB) Additional Information: full citation, abstract, references, citings, index terms

The advent of open architectures and initiatives in massively parallel supercomputing, combined with the maturation of distributed processing methods and algorithms, has enabled the implementation of responsive software-based fault tolerance. Expanding capabilities of distributed Ada runtime environments further stimulate the incorporation of hardware fault tolerance into critical, realtime embedded systems. Through the integration of proven Ada program component distribution and virtually ...

7 Window real objects: a distributed shared memory for distributed implementation of GUI applications
Noboru Koshizuka, Ken Sakamura
December 1993 **Proceedings of the 6th annual ACM symposium on User interface software and technology**
Full text available: pdf(1.31 MB) Additional Information: full citation, references, index terms

Keywords: BTRON, distributed shared memory, graphical user interface, multiuser interface, parallel programming, window system

8 A Simulation Support System Capable Of Control, Monitoring And Simulation Of Airborne Systems
John C. Ostgaard
December 1978 **Proceedings of the 1978 annual conference**

Full text available: pdf(528.89 KB) Additional Information: full citation, abstract, references, index terms

With increasing use of simulations as a means of demonstrating and verifying systems, more emphasis has been placed on simulation support systems capable of sustaining these demonstrations. This paper contains a discussion of a current Support System used in conjunction with the Digital Avionics Information System (DAIS) Program being conducted at the Air Force Avionics Laboratory, Wright-Patterson Air Force Base. Descriptions of Support Hardware Systems and Software Support and ...

9

Natural language interfaces: Lifer: a natural language interface facility
Gary G. Hendrix
February 1977 **ACM SIGART Bulletin**, Issue 61

Full text available: pdf(209.13 KB) Additional Information: full citation, abstract, references

This note describes LIFER, a practical facility for creating natural language interfaces to other computer software. Emphasizing human engineering, LIFER has bundled natural language specification and parsing technology into one convenient package.

10 A model for software design facilitating man-machine interface variations
Barbara A. Huckle, Gordon M. Bull
October 1984 **ACM SIGCHI Bulletin**, Volume 16 Issue 2

Full text available: pdf(501.07 KB) Additional Information: full citation, abstract, references

A model is proposed for the design of software that will interact with a human operator. The model facilitates changes to the software system during its lifetime, by separating the terminal drivers, the man-machine interface and the functionality. This provides for changes of terminal through which the human operator interacts with the software, changes to the man-machine interface, and modifications or extensions to the facilities provided by the software system.

11 Structured design benefits to a process control software project
G. P. Benincasa, A. Daneels, P. Heymans, Ch. Serre
August 1978 **Proceedings of the first SIGMINI symposium on Small systems**

Full text available: pdf(576.80 KB) Additional Information: full citation, abstract, references, index terms

A 12-man-year process control software project has been successfully completed in 12 months without interruption of the production process of CERN PS accelerators. After 6 months of careful preparation by a small team, 9 man-years of software, i.e. around 100 control programs amounting to more than 40'000 instructions, have been produced in 6 months by 6 experienced full-time software engineers and 24 part-time engineers and technicians, part of whom had never programmed before. The deliver ...

12 The gould NP1 system interconnecting
D. J. Vianney, J. H. Thomas, V. Rabaza
June 1988 **Proceedings of the 2nd international conference on Supercomputing**

Full text available: pdf(1.28 MB) Additional Information: full citation, abstract, references, index terms

The Gould NP1 is a multicomputer multiprocessing system designed for high performance and parallel processing required in diverse scientific and engineering applications. The NP1's basic building block is a dual-processor single bus system which can be expanded up to eight processors over four system buses. This paper discusses the overall design and implementation of tne NP1 system interconnection in particularly the inter-system bus link which interconnects four system buses to ...

13 An efficient and lightweight embedded Web server for Web-based network element management
Hong-Taek Ju, Mi-Joung Choi, James W. Hong
September 2000 **International Journal of Network Management**, Volume 10 Issue 5

Full text available: pdf(428.26 KB) Additional Information: full citation, abstract, references, index terms

An Embedded Web Server (EWS) is a Web server which runs on an embedded system with limited computing resources to serve embedded Web documents to a Web browser. By embedding a Web server into a network device, it is possible to provide a Web‐based management user interface, which are user‐friendly, inexpensive, cross‐platform, and network‐ready. This article explores the topic of an efficient and lightweight embedded Web server for Web‐based netw ...

14 Survey of personal interactive multimedia technologies

Chingshun Cheng, C. Jinshong Hwang
April 1999 **Proceedings of the 19th annual conference on Computer Science**
Full text available: pdf(598.74 KB) Additional Information: full citation, references

15 Rapid prototyping of microprocessor-based systems
Raj S. Mitra, Biswarooop Guha, Anupam Basu
November 1993 **Proceedings of the 1993 IEEE/ACM international conference on Computer-aided design**
Full text available: pdf(418.02 KB) Additional Information: full citation, references

16 Managing Ada development risk in a non-Ada-based workstation environment
Kourosh R. Dinyari, Thomas M. Johndrew, Kenneth J. Lamarche
December 1990 **Proceedings of the conference on TRI-ADA '90**
Full text available: pdf(939.67 KB) Additional Information: full citation, abstract, references

There is increasing demand for systems with user friendly interfaces to complex automation. Workstations are especially well-suited for these complex systems because interactive graphics coupled with multiprocessing capability is offered in one small platform. Unfortunately, the current available graphics workstations are essentially a hostile environment for Ada developers. However, a successful Ada implementation within project cost and schedule constraints can be achieved when the proble ...

17 A survey of three dialogue models
Mark Green
July 1986 **ACM Transactions on Graphics (TOG)**, Volume 5 Issue 3
Full text available: pdf(2.32 MB) Additional Information: full citation, abstract, references, citings, index terms

A dialogue model is an abstract model that is used to describe the structure of the dialogue between a user and an interactive computer system. Dialogue models form the basis of the notations that are used in user interface management systems (UIMS). In this paper three classes of dialogue models are investigated. These classes are transition networks, grammars, and events. Formal definitions of all three models are presented, along with algorithms for converting the notations into an execu ...

18 Programmable applications: interpreter meets interface
Michael Eisenberg
April 1995 **ACM SIGCHI Bulletin**, Volume 27 Issue 2
Full text available: pdf(4.42 MB) Additional Information: full citation, abstract, citings, index terms

Current fashion in "user-friendly" software design tends to place an over-reliance on direct manipulation interfaces. To be truly expressive (and thus truly user-friendly), applications need both learnable interfaces and domain-enriched languages that are accessible to the user. This paper discusses some of the design issues that arise in the creation of such *programmable applications.* As an example, we present "SchemePaint," a graphics application that combines a MacPaint-like interface ...

19 Special session on reconfigurable computing: Reconfigurable platforms for ubiquitous computing
Manfred Glesner, Thomas Hollstein, Leandro Soares Indrusiak, Peter Zipf, Thilo Pionteck, Mihail Petrov, Heiko Zimmer, Tudor Murgan
April 2004 **Proceedings of the first conference on computing frontiers on Computing frontiers**
Full text available: pdf(479.97 KB) Additional Information: full citation, abstract, references, index terms

Ubiquitous computing requires flexibilty. Melting distributed electronic devices into

everyday's life implies the need to adapt to evolving standards and dynamic environments. Furthermore, to gain user acceptance, such devices should be able to adapt to different usage patterns and user profiles. Scalability is also an important issue, allowing functional enhancements to already deployed systems. In this work we address these issues applying the concept of reconfigurability on different abstract ...

Keywords: communication, dynamic power management, networks-on-chip, reconfigurable hardware, reconfigurable processors, reconfiguration, ubiquitous computing

20 Restricted object based design of event driven commercial software

M. Krieger, S. Lemire

October 1994 **Proceedings of the 1994 conference of the Centre for Advanced Studies on Collaborative research**

Full text available: pdf(46.55 KB) Additional Information: full citation, abstract, references, index terms

The Restricted Object Based Design (ROBD) methodology was developed for the implementation of interactive commercial software in which the desired response is elicited by initiating an event, i.e., a request. Shrink-wrap software, operator-assistants, simulators and business software are prime examples. This methodology has its roots in the *multiactivity paradigm*, which is based on two observations. First, all work has two components: the various *activities* that must be executed an ...

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Terms used **interface module** and **application software** and **dataless**

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21 Highlights of ISSCC: high-speed heterogenous design techniques: A reconfigurable signal processing IC with embedded FPGA and multi-port flash memory

M. Borgatti, L. Calì, G. De Sandre, B. Forêt, D. Iezzi, F. Lertora, G. Muzzi, M. Pasotti, M. Poles, P. L. Rolandi

June 2003 **Proceedings of the 40th conference on Design automation**

Full text available: pdf(402.77 KB) Additional Information: full citation, abstract, references, citings, index terms

A 1GOPS dynamically reconfigurable processing unit with embedded Flash memory and SRAM-based FPGA targets image-voice processing and recognition applications. Code, data and FPGA bitstreams are stored in the embedded Flash memory and are independently accessible through 3 content-specific, 64-bit I/O ports with a peak read rate of 1.2GB/s. The system is implemented in a 0.18um, 2PL-6ML CMOS Flash technology, chip area is 70mm2.

Keywords: application-specific integrated circuits (ASICs), digital signal processors, field-programmable gate arrays (FPGAs), integrated circuit design, multimedia computing, reconfigurable architectures

22 An undergraduate course in applied data communications

Larry J. Brumbaugh

February 1989 **ACM SIGCSE Bulletin , Proceedings of the twentieth SIGCSE technical symposium on Computer science education**, Volume 21 Issue 1

Full text available: pdf(512.87 KB) Additional Information: full citation, abstract, references, citings, index terms

This paper describes a different type of data communications course than that presently offered in most computer science programs. Several justifications for such a course are provided.

23 The design and use of an object server in a distributed application

Jean Dollimore

September 1988 **Proceedings of the 3rd workshop on ACM SIGOPS European workshop: Autonomy or interdependence in distributed systems?**

Full text available: pdf(262.66 KB) Additional Information: full citation, abstract, references

This position paper is based on experiences gained in designing and implementing a distributed application to support communication between the members of a group of people working on a joint task ["Cosmos - A Configurable Structured Message System", Alvey project MMI/109]. At an early stage in the project, we adopted the well known ideas about the use of unique identifiers in distributed systems and concluded that we should build a set

of persistent objects with globally unique identifiers as a ...

24 Design of a microprocessor based programmable system to process temperature information from a hot surface

Thomas Philip, Stefan Jeglinski, Richard D. Benton, Robert L. Cook
April 1982 **Proceedings of the 20th annual Southeast regional conference**

Full text available: pdf(220.98 KB) Additional Information: full citation, abstract, references

A CDP1802 microprocessor based stand-alone system (target system) has been designed to control a two-color pyrometer (TCP) system remotely and to process the temperature information from a simulated magnetohydrodynamics (MHD) test facility, at Mississippi State University. The analog signals from two pyrometer detectors are digitized and the temperature and emissivity of the surface are computed. The results are displayed on a 20-column printer. Data at various emissivity settings are collected ...

25 Building a World-Wide virtual machine based on web and HPCC technologies

Kivanc Dincer, Geoffrey C. Fox
November 1996 **Proceedings of the 1996 ACM/IEEE conference on Supercomputing (CDROM)**

Full text available: pdf(303.07 KB) Additional Information: full citation, abstract, references, citings, index terms

In today's high performance computing arena, there is a strong trend toward building virtual computers from heterogeneous resources on a network. In this paper we describe our experiences in building a world-wide virtual machine (WWVM) based on emerging Web and existing HPCC technologies. We have constructed a Web-based parallel/distributed programming environment on top of this machine demonstrating MPI and PVM message-passing programs and High Performance Fortran programs. Alternatively, ...

26 SystemCSV - an extension of SystemC for mixed multi-level communication modeling and interface-based system design

R. Siegmund, D. Müller
March 2001 **Proceedings of the conference on Design, automation and test in Europe**

Full text available: pdf(101.38 KB) Additional Information: full citation, references, citings, index terms

27 A simulation from combat systems development and acceptance testing

Thad J. Janowiak
December 1990 **Proceedings of the 22nd conference on Winter simulation**

Full text available: pdf(439.93 KB) Additional Information: full citation, index terms

28 Communications networks for the force XXI digitized battlefield

Paul Sass
October 1999 **Mobile Networks and Applications**, Volume 4 Issue 3

Full text available: pdf(745.29 KB) Additional Information: full citation, abstract, references, citings, index terms

In striving to meet the increasing demands for timely delivery of multimedia information to the warfighter of the 21st Century, the US Army is undergoing a gradual evolution from its "legacy" communications networks to a flexible internetwork architecture based solidly on the underlying communications protocols and technology of the commercial Internet. The framework for this new digitized battlefield, as described in the DoD's Joint Technical Architecture (JTA), is taken from t ...

29 Supporting the restructuring of data abstractions through manipulation of a program visualization

Robert W. Bowdidge, William G. Griswold
April 1998 **ACM Transactions on Software Engineering and Methodology (TOSEM)**, Volume 7 Issue 2

Full text available: pdf(1.57 MB) Additional Information: full citation, abstract, references, citings, index terms

With a meaning-preserving restructuring tool, a software engineer can change a program's structure to ease future modifications. However, deciding how to restructure the program requires a global understanding of the program's structure, which cannot be derived easily by directly inspecting the source code. We describe a manipulable program visualization—the star diagram—that supports the restructuring task of encapsulating a global data structure. The star diag ...

Keywords: meaning-preserving restructuring, semi-automated restructuring, software visualization, star diagram, tool-supported restructuring

30 Distributed information management in the National HPCC Software Exchange
Shirley Browne, Jack Dongarra, Geoffrey C. Fox, Ken Hawick, Ken Kennedy, Rick Stevens, Robert Olson, Tom Rowan
December 1995 **Proceedings of the 1995 ACM/IEEE conference on Supercomputing (CDROM)**

Full text available: html(42.98 KB) Additional Information: full citation, references, index terms

31 Software development in Core: the application of Ada and spiral development
Richard Simonian
December 1992 **Proceedings of the conference on TRI-Ada '92**

Full text available: pdf(806.21 KB) Additional Information: full citation, references, index terms

32 A procedure for designing abstract interfaces for device interface modules
Kathryn Heninger Britton, R. Alan Parker, David L. Parnas
March 1981 **Proceedings of the 5th international conference on Software engineering**

Full text available: pdf(869.26 KB) Additional Information: full citation, abstract, references, citings, index terms

This paper describes the abstract interface principle and shows how it can be applied in the design of device interface modules. The purpose of this principle is to reduce maintenance costs for embedded real-time software by facilitating the adaptation of the software to altered hardware interfaces. This principle has been applied in the Naval Research Laboratory's redesign of the flight software for the Navy's A-7 aircraft. This paper discusses a design approach based on the abstract inter ...

Keywords: Abstract interfaces, Device interface modules, Embedded software, Information-hiding modules, Module specifications, Real-time software, Software design techniques, Software maintenance cost reduction, Virtual devices

33 Synthesis of concurrent system interface modules with automatic protocol conversion generation
Bill Lin, Steven Vercauteren
November 1994 **Proceedings of the 1994 IEEE/ACM international conference on Computer-aided design**

Full text available: pdf(1.04 MB) Additional Information: full citation, abstract, references, citings, index terms

We describe a new high-level compiler called Integral for designing system interface modules. The input is a high-level concurrent algorithmic specification that can model

complex concurrent control flow, logical and arithmetic computations, abstract communication, and low-level behavior. For abstract communication between two communicating modules that obey different I/O protocols, the necessary protocol conversion behaviors are automatically synthesized using ...

34 Centralization vs. decentralization of application software

David Schuff, Robert St. Louis

June 2001 **Communications of the ACM**, Volume 44 Issue 6

Full text available: pdf(103.22 KB) html(30.50 KB) Additional Information: full citation, references, index terms, review

35 Special session on mobile computing #3: An FSM model for situation-aware mobile application software systems

Yu Wang

April 2004 **Proceedings of the 42nd annual Southeast regional conference**

Full text available: pdf(348.40 KB) Additional Information: full citation, abstract, references

Situation-awareness is a desirable feature of application software systems in mobile computing environments. In this paper, we present an extended finite state machine model for the situation-aware mobile application software systems. In this model, each state represents an impromptu condition that a system is presented, and the state is characterized by the historical context record and the internal action record. Each state transition in the model represents a context input. The whole finite s ...

Keywords: context, finite finite state machine, mobile computing, situation, situation-awareness

36 Characteristics of application software maintenance

B. P. Lientz, E. B. Swanson, G. E. Tompkins

June 1978 **Communications of the ACM**, Volume 21 Issue 6

Full text available: pdf(577.64 KB) Additional Information: full citation, abstract, references, citings, index terms

Maintenance and enhancement of application software consume a major portion of the total life cycle cost of a system. Rough estimates of the total systems and programming resources consumed range as high as 75-80 percent in each category. However, the area has been given little attention in the literature. To analyze the problems in this area a questionnaire was developed and pretested. It was then submitted to 120 organizations. Respondents totaled 69. Responses were analyzed with the SPSS ...

Keywords: management and technical issues, software maintenance, use of productivity aids

37 Application software maintenance: can it be controlled?

Glenn L. Helms, Ira R. Weiss

December 1984 **ACM SIGMIS Database**, Volume 16 Issue 2

Full text available: pdf(234.91 KB) Additional Information: full citation, abstract, references

Numerous studies have found that subsequent application software maintenance requires a significant amount of a data processing department's resources. Some of the major research in this area [1, 2, 3, 4] revealed the following:• in 1972, 30.1 percent of total programmer effort was devoted to maintenance• in 1978 twenty percent of the systems studied had allocated eighty-five percent of their annual analyst and programming hours to maintenance.• in 1979 as high as seventy-five per ...

38

Problems in application software maintenance

Bennet P. Lientz, E. Burton Swanson

November 1981 **Communications of the ACM**, Volume 24 Issue 11

Full text available: pdf(748.09 KB) Additional Information: full citation, abstract, references, citings, index terms

The problems of application software maintenance in 487 data processing organizations were surveyed. Factor analysis resulted in the identification of six problem factors: user knowledge, programmer effectiveness, product quality, programmer time availability, machine requirements, and system reliability. User knowledge accounted for about 60 percent of the common problem variance, providing new evidence of the importance of the user relationship for system success or failure. Problems of p ...

Keywords: application software maintenance, maintenance problem factors

39 Creating presentation slides: a study of user preferences for task-specific versus generic application software

Jeff A. Johnson, Bonnie A. Nardi

March 1996 **ACM Transactions on Computer-Human Interaction (TOCHI)**, Volume 3 Issue 1

Full text available: pdf(1.94 MB) Additional Information: full citation, abstract, references, citings, index terms, review

We conducted a study to investigate the use of generic versus task-specific application software by people who create and maintain presentation slides. Sixteen people were interviewed to determine how they prepare slides, what software they use to prepare and maintain slides, and how well the software they use supports various aspects of the task. The informants varied in how central slidemaking was to their jobs. The hypotheses driving the study were that: (1) some software applications ar ...

Keywords: application software, interoperability, interview study, slide presentations, task analysis, task specific

40 Promoting the organization-wide learning of application software

Frank Linton

December 1996 **ACM SIGOIS Bulletin**, Volume 17 Issue 3

Full text available: pdf(372.82 KB) Additional Information: full citation, abstract, index terms

This paper describes the characteristics of a system designed to promote one sort of organizational learning (Senge, 1990), in particular, to enhance the organization-wide learning of application software (note 1). The system presented here will (1) capture evolving expertise from a community of practice (Lave & Wenger 1991), (2) support less-skilled members of the community in acquiring that expertise, and (3) serve as an organizational memory for the expertise it captures. One version ...